



# Zemea® Propanediol

## Skin Efficacy Study

A consumer testing panel consisting of 15 female and 5 male subjects completed a skin efficacy study using an oil-in-water lotion with a 5% glycol concentration. The subjects tested 4 different formulations with a varying glycol component:

- Zemea® Propanediol
- Propylene Glycol
- Butylene Glycol
- Glycerin

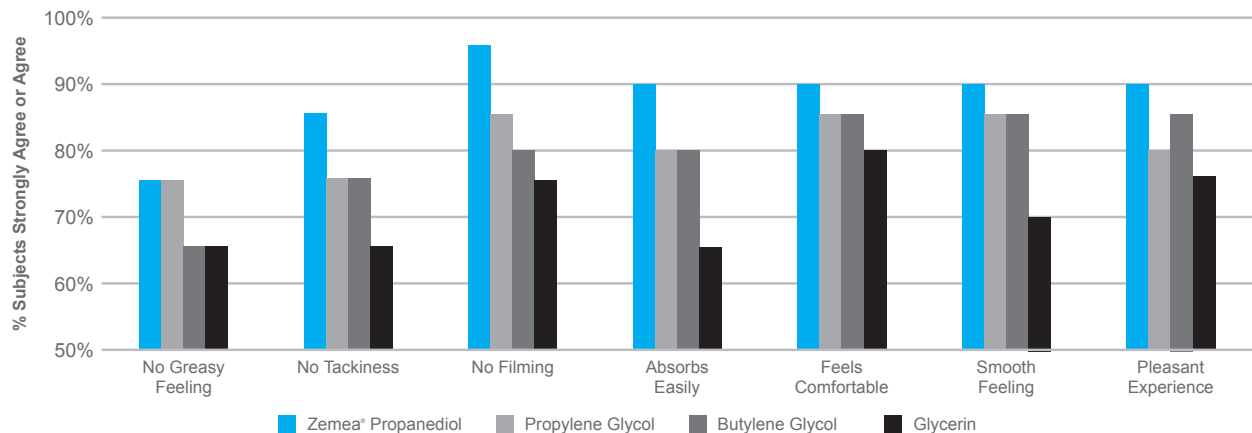
This four-day conditioning and three-day product use cycle design was administered by consumer Product Testing Company, Fairfield, NJ. This was a blind test and the formulations were randomized. The subjects completed a daily use diary and completed a questionnaire where they reported their level of agreement on a scale of 1-7 with 10 different statements regarding each lotion's sensory and use characteristics:

- Spreads Easily
- No Greasy Feeling
- No Tackiness
- No Filming
- Soft Feeling

- Absorbs Easily
- Feels Comfortable
- Smooth Feeling
- Pleasant Experience
- Skin Feel Moisturized

### Consumer Sensory Testing

Skin Lotion with 5% glycol



**Zemea® propanediol compares favorably in ALL attributes**

## Summary

Zemea® propanediol is a natural alternative to other petroleum based glycols and glycerin.

The consumer testing results indicate that Zemea® propanediol provides better sensorial perceptions in a skin care lotion.

Formulators should consider Zemea® propanediol for skin care products where they wish to reduce the feeling of tackiness, greasiness, film-forming, increase the perception of easy absorption and smoothness, providing an overall pleasant consumer experience.

## For additional information or samples:

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